MARATHON™

SPECIFICATIONS

Front Terminal Batteries

GNB

INDUSTRIAL POWER

From the World Leader in VRLA Battery Technology

Designed for durability in Telecommunications, and Electric Utility applications, the GNB **FRONT Terminal** ***MARATHON***™ series provides high performance and reliability in long duration discharge applications. The location of the terminals on the front (vs. the top) of the battery greatly facilitates the installation and maintenance of the product when placed in a cabinet enclosure or on a standard relay rack tray. The ***MARATHON***™ Front Terminal battery series highlights another example of GNB's extensive experience and world wide leadership in VRLA technology.

"Designed in" Quality Manufacturing

Quality manufacturing processes for the **MARATHON**™ series batteries incorporate the industry's most advanced technologies including: an automated helium leak detection system, a computer controlled "fill by weight" acid filler, and a temperature controlled water bath formation process. Each and every unit is capacity tested.

High Performance MARATHON™ Series Features

- Flame-retardant reinforced container and cover compliant with UL94 V-0, 28% L.O.I.
- Integrated flash arrester ultrasonically welded into cover.
- Patented "Diamond Side-Wall" design to maintain structural integrity in higher operating temperatures
- Heat sealed case-to-cover bond to ensure a leak proof seal
- High-Compression Absorbent Glass Mat (AGM) technology for greater than 99% recombination efficiency
- High-tin, calcium, silver, lead positive plate design for maximum service float life; 10 year design life @ 25°C (77°F)
- Front Accessible Copper Alloy Terminals & "Easy On/Easy Off" Post Protector
- Reliable one-way, self-resealing safety vents
- Integrated Carry Handles
- Multicell design for faster installation and reduced maintenance

Applications

MARATHON™ series batteries incorporate GNB's advanced VRLA technology designed for long life and high performance in:

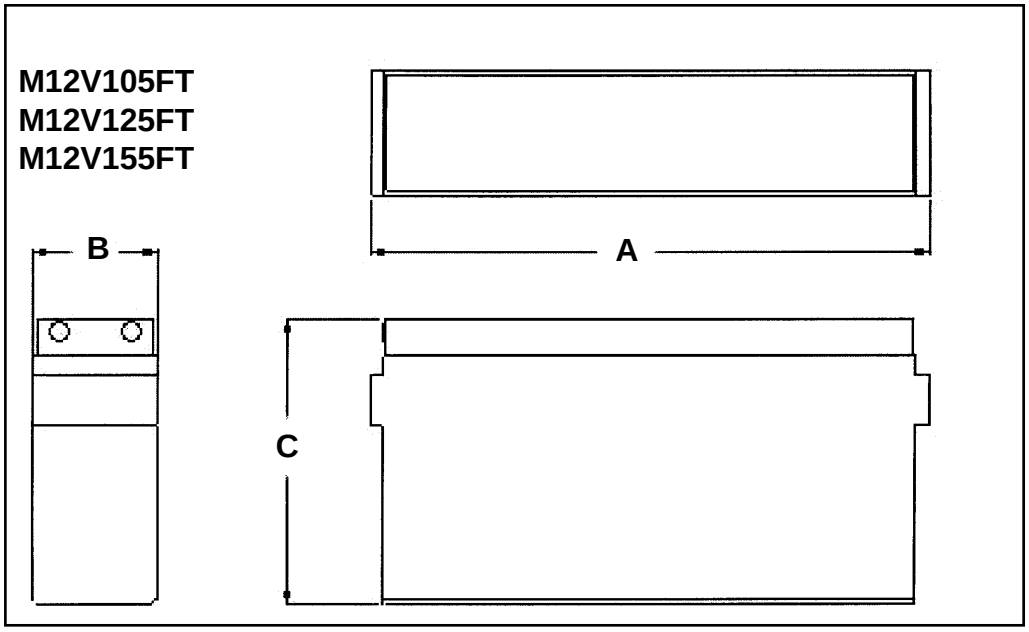
<u>Telecommunications</u>
- Distributed Power
- PCS
- Cellular
- Broadband

<u>Electric Utility</u>
- Switchgear Control Power
- Communications

UL Recognized Component

MARATHON™ Front Terminal Specifications

Model Number	Voltage	Capacity (AH)		Nominal Dimensions						Nominal Weight	
				Inches			Millimeters				
		8 Hr To 1.75 VPC @ 25°C	10 hr To 1.80 VPC @ 20°C	A	B	C	A	B	C	lbs.	Kg
M12V105FT	12	104	100	20.12	4.33	9.38	511	110	238	79	35.8
M12V125FT	12	125	121	22.00	4.90	11.15	559	124	283	105	47.6
M12V155FT	12	155	150	22.00	4.90	11.15	559	124	283	119	53.8



Float Voltage & Charging

Constant Voltage charging is recommended

Recommended float voltage: 2.27 VPC @ 25°C (77°F)

Float Voltage Range: 2.25 to 2.30 VPC @ 25°C (77°F)

Equalize voltage: 2.35 VPC for 24 Hours

MARATHON™ Front Terminal Electrical Data

Model Number	Short Circuit Current	Internal Resistance (mOhms)
M12V105FT	3125	4.0
M12V125FT	3814	3.2
M12V155FT	3883	3.0

NOTE: Design and/or specifications subject to change without notice. If questions arise, contact your local GNB sales representative for clarification

MARATHON™ Performance Specifications
Amperes @ 25°C (77°F)

1.75 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.7	8.9	10.6	11.7	13.0	14.5	16.5	19.2	23.1	29.2	33.9	40.8	51.6	71.8	118.4
M12V125FT	5.7	10.8	12.7	14.0	15.6	17.6	20.3	24.0	29.4	38.1	43.7	51.8	65.3	90.4	145.3
M12V155FT	7.0	13.3	15.7	17.4	19.4	21.7	24.7	28.8	34.8	44.4	51.7	62.4	77.7	105.8	179.4

1.78 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.6	8.8	10.4	11.5	12.8	14.4	16.4	19.0	22.8	28.9	33.6	40.3	51.0	71.1	115.1
M12V125FT	5.7	10.7	12.6	13.9	15.4	17.4	20.1	23.7	29.0	37.7	43.3	51.2	64.4	88.9	139.8
M12V155FT	6.9	13.1	15.5	17.1	19.1	21.5	24.4	28.5	34.4	43.9	51.2	61.9	76.9	104.4	176.4

1.80 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.6	8.7	10.3	11.4	12.7	14.3	16.2	18.9	22.7	28.7	33.3	40.0	50.6	70.5	112.9
M12V125FT	5.6	10.6	12.5	13.8	15.3	17.3	19.9	23.5	28.8	37.4	42.9	50.8	63.8	87.8	136.3
M12V155FT	6.9	13.0	15.4	17.0	19.0	21.3	24.2	28.3	34.2	43.6	50.9	61.5	76.1	102.9	172.4

1.81 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.6	8.7	10.2	11.3	12.6	14.2	16.1	18.7	22.5	28.5	33.0	39.6	50.1	69.8	111.2
M12V125FT	5.6	10.5	12.4	13.6	15.2	17.2	19.7	23.3	28.5	37.1	42.5	50.2	63.0	86.6	133.6
M12V155FT	6.8	12.9	15.3	16.9	18.9	21.1	24.0	28.0	33.9	43.2	50.5	61.0	75.4	101.5	169.0

1.83 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.5	8.5	10.1	11.1	12.4	14.0	15.9	18.5	22.2	28.0	32.5	38.9	49.2	68.4	107.9
M12V125FT	5.5	10.3	12.2	13.4	14.9	16.8	19.4	22.8	28.0	36.3	41.6	49.2	61.5	84.3	128.4
M12V155FT	6.7	12.7	15.0	16.6	18.6	20.7	23.7	27.6	33.3	42.5	49.6	59.9	73.7	98.8	162.3

MARATHON™ Performance Specifications
Amperes @ 25°C (77°F)

1.85 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.5	8.4	9.9	10.9	12.2	13.8	15.7	18.2	21.8	27.5	31.9	38.2	48.3	67.1	105.7
M12V125FT	5.4	10.2	12.0	13.2	14.7	16.5	19.0	22.4	27.4	35.6	40.8	48.1	60.1	82.1	123.5
M12V155FT	6.6	12.5	14.9	16.4	18.3	20.4	23.3	27.1	32.8	41.8	48.8	58.9	72.2	96.2	155.9

1.87 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.3	8.2	9.7	10.7	11.9	13.4	15.3	17.7	21.2	26.7	31.0	37.1	46.8	64.9	101.5
M12V125FT	5.3	9.8	11.6	12.7	14.2	16.0	18.3	21.6	26.4	34.2	39.3	46.6	58.6	80.8	119.3
M12V155FT	6.4	12.2	14.4	15.9	17.7	19.8	22.6	26.3	31.7	40.4	47.1	56.9	69.7	92.8	141.6

1.90 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	4.1	7.8	9.2	10.2	11.3	12.8	14.7	17.0	20.3	25.6	29.6	35.4	44.6	61.6	95.0
M12V125FT	5.0	9.3	11.0	12.1	13.4	15.1	17.3	20.4	24.9	32.2	37.0	43.9	54.9	75.2	109.1
M12V155FT	6.1	11.7	13.8	15.2	17.0	18.9	21.5	25.0	30.2	38.4	44.7	53.9	65.7	87.0	136.9

1.92 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	3.9	7.4	8.7	9.6	10.7	12.1	13.9	16.4	19.5	24.4	28.2	33.6	42.1	57.9	89.1
M12V125FT	4.7	8.8	10.5	11.5	12.6	14.2	16.4	19.3	23.6	30.3	34.8	41.2	51.2	69.8	95.1
M12V155FT	5.8	11.0	13.0	14.3	15.9	18.0	20.5	23.9	28.7	36.4	42.3	50.8	61.9	81.7	112.6

1.94 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	3.7	7.0	8.3	9.1	10.1	11.4	13.1	15.5	18.6	23.2	26.7	31.8	39.7	54.3	82.8
M12V125FT	4.4	8.3	9.8	10.8	11.9	13.3	15.3	18.0	22.0	28.0	32.1	38.0	47.3	64.4	80.7
M12V155FT	5.5	10.3	12.2	13.4	14.9	16.9	19.4	22.7	27.3	34.7	40.2	48.0	58.3	76.7	98.6

MARATHON™ Performance Specifications
Watts per Cell @ 25°C (77°F)

1.75 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.9	16.9	20.0	22.0	24.6	27.8	31.2	36.2	43.5	55.2	64.1	77.0	97.6	136.2	221.0
M12V155FT	13.7	26.1	30.9	34.0	38.0	42.3	47.8	55.2	66.1	82.9	96.1	115.2	144.9	200.3	326.6

1.78 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.8	16.8	19.8	21.8	24.3	27.5	30.9	35.9	43.1	54.7	63.5	76.3	96.7	135.0	217.6
M12V155FT	13.6	25.9	30.6	33.8	37.7	41.8	47.3	54.7	65.5	82.5	95.5	114.2	143.9	199.3	323.6

1.80 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.8	16.7	19.7	21.7	24.2	27.4	30.7	35.7	42.9	54.3	63.1	75.8	96.0	134.0	214.6
M12V155FT	13.5	25.7	30.5	33.6	37.5	41.5	46.9	54.3	64.9	81.8	94.7	113.2	142.6	197.3	318.5

1.81 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.8	16.5	19.6	21.6	24.0	27.2	30.5	35.5	42.6	53.9	62.6	75.2	95.2	132.9	211.9
M12V155FT	13.5	25.6	30.3	33.4	37.2	41.2	46.6	53.9	64.5	81.1	93.8	112.2	141.2	195.2	314.0

1.83 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.6	16.3	19.3	21.3	23.7	26.8	30.3	35.0	42.0	53.2	61.7	74.1	93.8	130.7	209.1
M12V155FT	13.3	25.2	29.8	32.9	36.7	40.7	46.0	53.2	63.5	79.8	92.3	110.2	138.5	191.1	305.2

MARATHON™ Performance Specifications
Watts per Cell @ 25°C (77°F)

1.85 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.6	16.1	19.0	20.9	23.2	26.2	30.0	34.5	41.4	52.4	60.8	72.9	92.2	128.4	204.8
M12V155FT	13.1	24.9	29.4	32.4	36.2	40.2	45.4	52.5	62.6	78.6	90.7	108.2	135.8	187.1	296.7

1.87 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.4	15.6	18.4	20.3	22.6	25.5	29.3	33.7	40.4	51.0	59.2	71.0	89.7	124.7	197.6
M12V155FT	12.8	24.2	28.6	31.5	35.1	39.2	44.2	51.0	60.8	76.1	87.8	104.6	131.0	180.0	282.3

1.90 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	8.0	15.0	17.7	19.4	21.6	24.4	28.0	32.3	38.7	48.9	56.7	68.0	85.8	119.2	187.4
M12V155FT	12.3	23.2	27.5	30.3	33.7	37.6	42.3	48.8	58.0	72.4	83.7	100.0	124.2	168.5	262.1

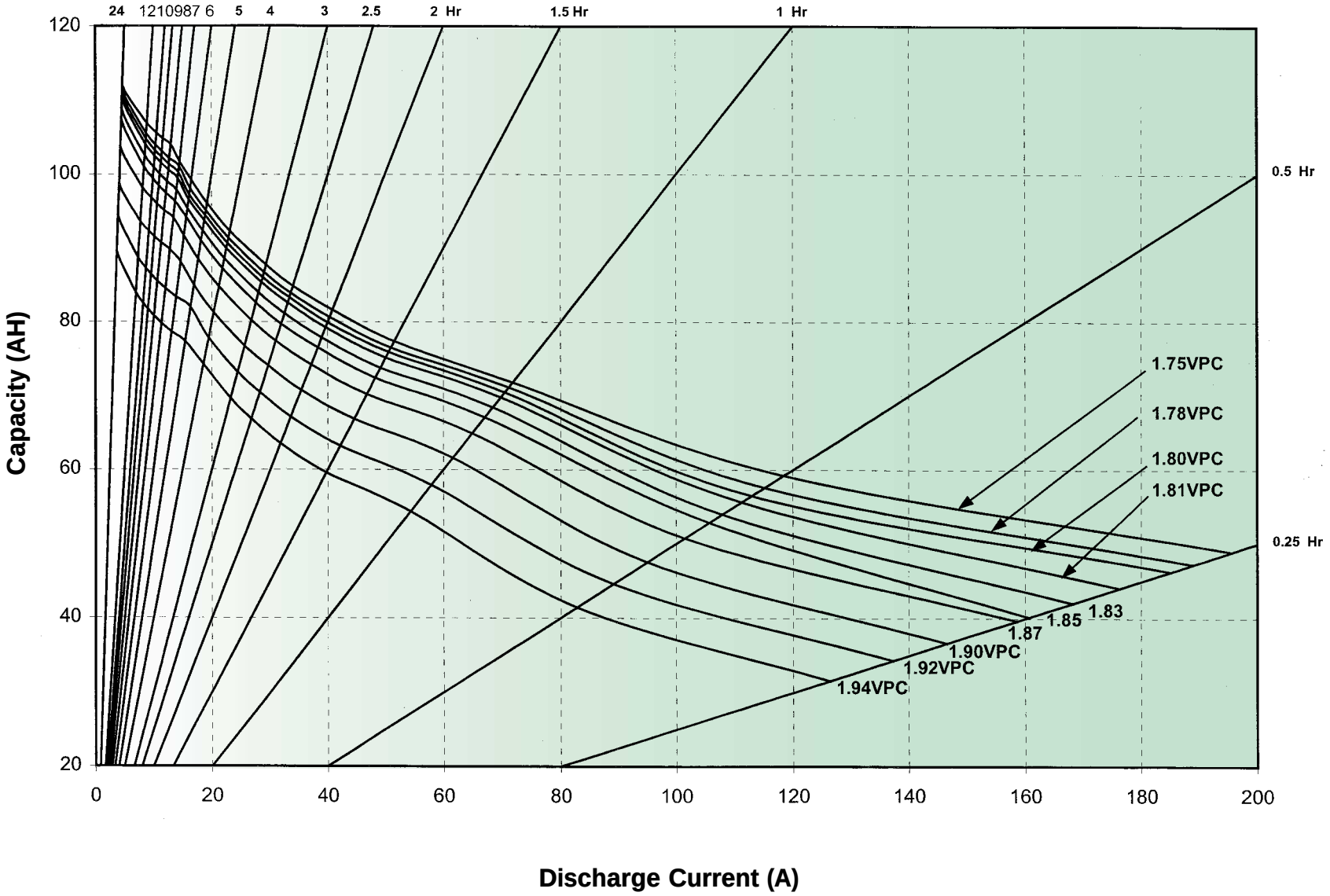
1.92 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	7.6	14.2	16.8	18.4	20.5	23.1	26.5	31.2	36.9	46.5	53.8	64.4	81.2	112.5	177.1
M12V155FT	11.7	22.1	26.1	28.7	31.9	35.7	40.4	46.6	55.6	69.8	80.6	96.1	118.2	158.3	243.1

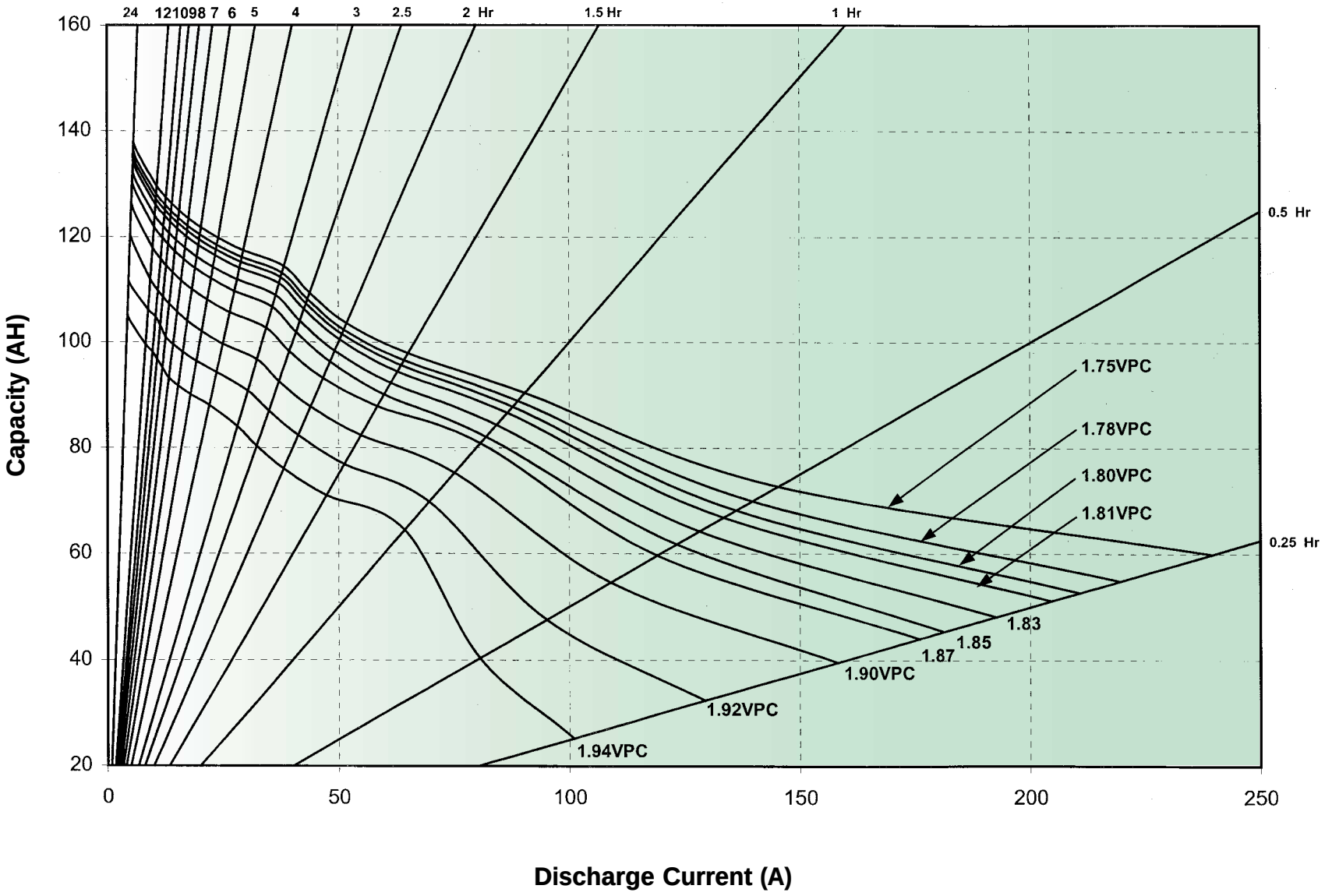
1.94 Final VPC

Model Number	Time														
	24 hr	12 hr	10 hr	9 hr	8 hr	7 hr	6 hr	5 hr	4 hr	3 hr	2.5 hr	2 hr	1.5 hr	1 hr	0.5 hr
M12V105FT	7.2	13.5	15.9	17.4	19.4	21.8	25.1	29.5	35.1	44.1	51.0	60.9	76.6	105.8	167.2
M12V155FT	11.2	20.9	24.7	27.1	30.2	34.1	38.5	44.5	53.0	66.5	76.8	91.6	112.1	149.0	226.2

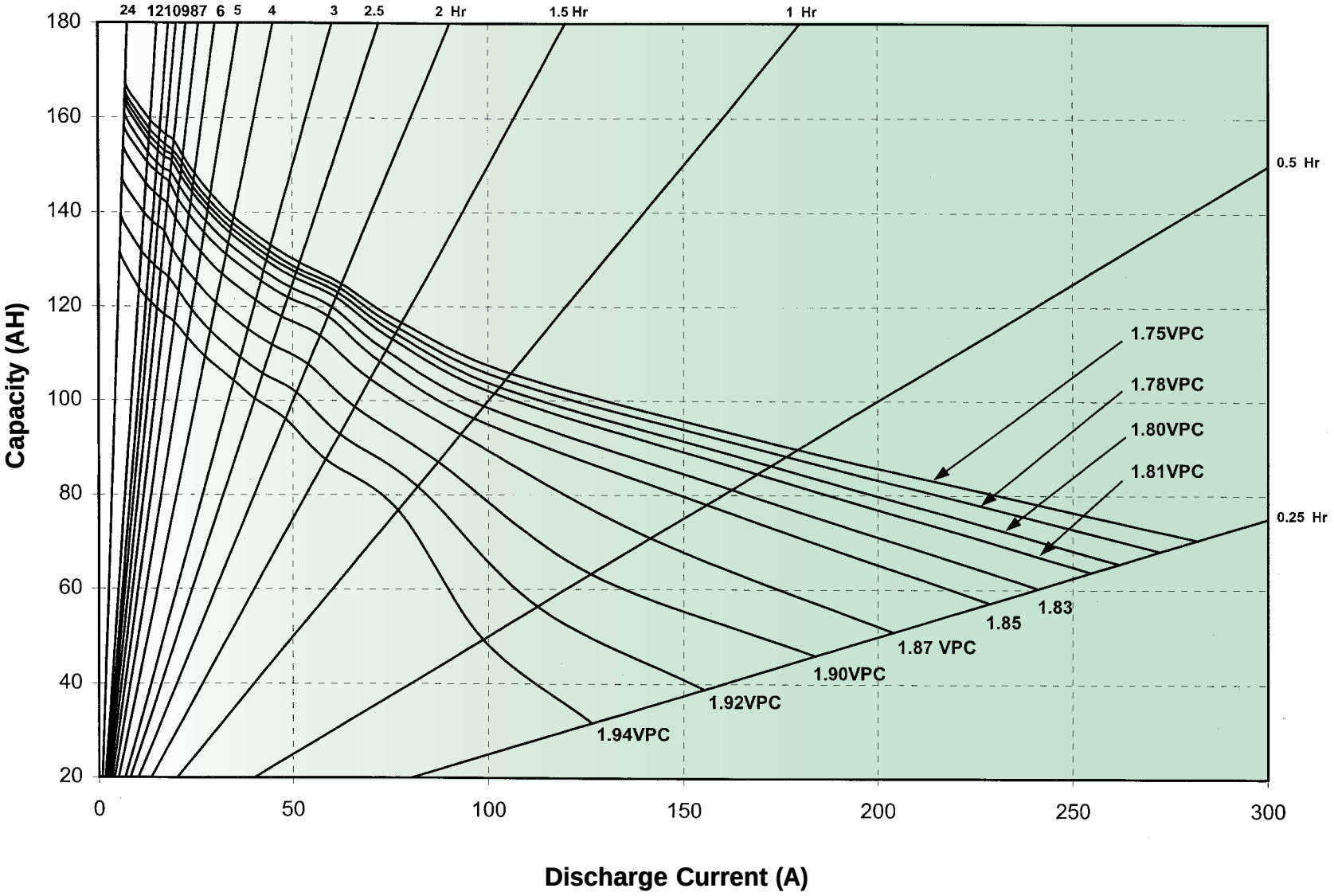
M12V105FT - Performance Curves @ 25°C (77°F)



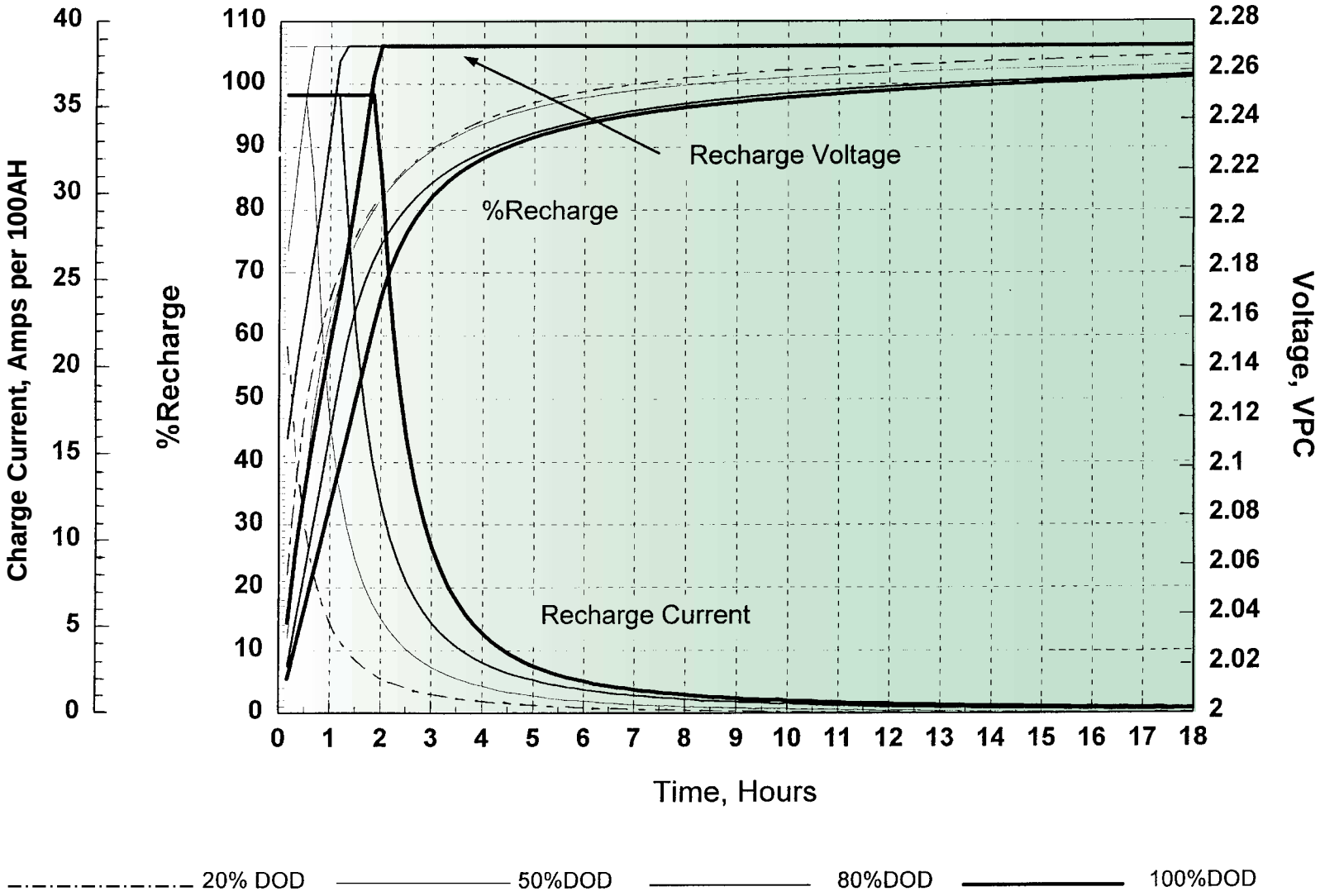
M12V125FT - Performance Curves @ 25°C (77°F)



M12V155FT - Performance Curves @ 25°C (77°F)

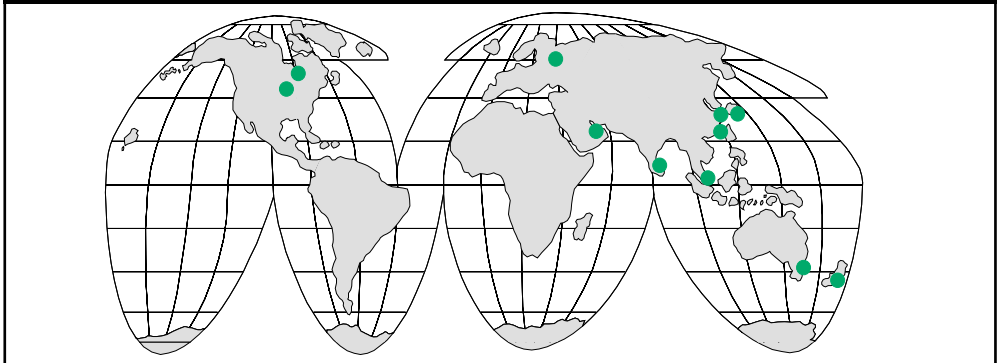


Recharge Characterization
2.27 VPC Float @ 25°C (77°F)



MARATHON™

Industry Leader in Network Power



The Network Power Division of Exide Technologies is ***the*** global leader in stored electrical energy solutions for all major critical reserve power applications and needs. Such network power applications include communication/data networks, UPS systems for computers and control systems, and electrical power generation and distribution systems. With a strong manufacturing base in both North America and Europe and a truly global reach (operations in greater than 80 countries) in sales and service, the Network Power Division has all of the tools necessary to satisfy your power needs.

Based on over 100 years of technological innovation the Network Power Division continues to lead the industry with such recognized global brands as Absolyte, Sonnenschein, Marathon, Sprinter, and Flooded Classic. These products and brands are synonymous with quality, reliability, performance and excellence in all markets served.

In addition to being the leader in delivering premium products to the market, Exide Technologies takes pride in it's commitment to the environment. As part of a complete approach to manufacturing, distributing, and recycling lead acid batteries, the Total Battery Management program has been developed to ensure a safe and responsible life cycle for all of our products.

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